

IQWiG Reports – Commission No. S14-01

Screening for visual impairment in children younger than 6 years (follow- up commission to commission S05-02)¹

Executive Summary

¹ Translation of the executive summary of the rapid report *Früherkennung von Sehstörungen bei Kindern bis zur Vollendung des 6. Lebensjahres (Folgauftrag zu Auftrag S05-02)*, (Version 1.1; Status: 10 June 2015). Please note: This translation is provided as a service by IQWiG to English-language readers. However, solely the German original text is absolutely authoritative and legally binding.

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Institute for Quality and Efficiency in Health Care
Im Mediapark 8 (KölnTurm)
50670 Cologne
Germany

Tel.: +49 (0)221 – 35685-0
Fax: +49 (0)221 – 35685-1
E-Mail: berichte@iqwig.de
Internet: www.iqwig.de

This report was prepared in collaboration with external experts.

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External experts:

- Jos Kleijnen, Kleijnen Systematic Reviews Ltd, York, United Kingdom
- Rob Riemsma, Kleijnen Systematic Reviews Ltd, York, United Kingdom
- Robert Wolff, Kleijnen Systematic Reviews Ltd, York, United Kingdom

IQWiG thanks the external experts for their collaboration in the project.

IQWiG employees:²

- Martina Markes
- Ulrike Lampert
- Fülöp Scheibler
- Sibylle Sturtz

² Due to legal data protection regulations, employees have the right not to be named.

Executive summary

With its letter of 24 October 2014, the Federal Joint Committee (G-BA) commissioned the Institute for Quality and Efficiency in Health Care (IQWiG) to update the benefit assessment of *Screening for visual impairment in children younger than 6 years* (commission S05-02).

Research question

The aim of this investigation was to answer the question whether and, if applicable, which changes in the conclusion of final report S05-02 arise from literature published on the topic of this commission after completion of the report.

Methods

The basis of the present rapid report is an update search covering the period between January 2008 and October 2014; the search for evidence and its assessment basically followed the same methodology as in commission S05-02. We thus refer to Chapter 4 of the (German) final report and to the corresponding English executive summary (see link below). The following amendments to the methodological approach were made:

If suitable screening studies were lacking – as in project S05-02 – the benefit of an earlier versus a later intervention was to be evaluated on the basis of treatment studies. However, in contrast to project S05-02, the diagnostic accuracy of the respective screening test was only to be examined if treatment studies had shown the benefit of bringing forward treatment.

Data were extracted into standardized tables. To evaluate the certainty of results, the risk of bias at study and outcome level was assessed and in each case rated as low or high. The results of the individual studies were organized according to outcomes and described. Insofar as the studies were comparable with regard to the research question and relevant characteristics, the individual results were to be pooled quantitatively by means of meta-analyses. Further amendments were made in the search for evidence according to IQWiG's current approach to information retrieval.

Results

No screening studies published after completion of report S05-02 could be identified in the update search. As no new conclusion on the benefit of vision screening could be drawn on the basis of studies evaluating the whole screening chain, the benefit was evaluated on the basis of treatment studies. One treatment study published after completion of report S05-02 was included in which a comparison of earlier versus later treatment was possible via subgroup data. The patient-relevant benefit or harm of earlier versus later treatment of amblyopia could not be demonstrated in this study. The diagnostic accuracy of the respective screening tests was not examined, as the benefit of bringing forward treatment could not be shown via treatment studies.

Conclusion

The studies published after completion of project S05-02 do not allow derivation of a benefit of vision screening in preschool-aged children, either. As no ongoing screening studies could be identified, no informative new results on this research question can be expected in the foreseeable future.

Keywords: vision screening, vision disorders, child, benefit assessment, systematic review

*The full rapid report (German version) is published under
<https://www.iqwig.de/de/projekte-ergebnisse/projekte/nichtmedikamentoese-verfahren/s14-01-fruherkennungsuntersuchung-von-sehstoerungen-bei-kindern-bis-zur-vollendung-des-6-lebensjahres-rapid-report.6371.html#overview>*

*An executive summary of the preceding final report S05-02 is published in English under
<https://www.iqwig.de/en/projects-results/projects/non-drug-interventions/s05-02-screening-for-visual-impairment-in-children.1180.html>*